

WHAT IS CLAIMED IS:

1. A method for using an IP (Internet Protocol) address on a LAN
(Local Area Network) including a router and a LAN device, the method
5 comprising the steps of:

 sending a unique IP address request from the LAN device to the router to
be allocated a unique IP address, when the LAN device needs a unique IP
address; and

 returning the allocated unique IP address from the LAN device to the
10 router after using the allocated unique IP address.

2. The method as claimed in claim 1, further comprising the step of
the LAN device informing the allocated unique IP address, when it is necessary
for an application performed in the LAN device to inform the other party of its
15 own IP address.

3. A method for using an IP address on a LAN including a router
and a LAN device, comprising the steps of:

 providing a dynamic unique IP address pool in the router having unique
20 IP addresses which are not statically allocated to a specific LAN device;

 allocating the unique IP address of the dynamic unique IP address pool
upon receipt of a unique IP address request from the LAN device; and

 the router adding the allocated unique IP address returned from the LAN
device to the dynamic unique IP address pool.

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4. A method for using an IP address on a LAN including a router
and a LAN device, comprising the steps of:

 sending a unique IP address request from the LAN device to the router to
be allocated a unique IP address, when the LAN device needs a unique IP
30 address;

providing a dynamic unique IP address pool in the router having unique IP addresses which are not statically allocated to a specific LAN device;

allocating the unique IP address of the dynamic unique IP address pool upon receipt of a unique IP address request from the LAN device;

5 returning the allocated unique IP address from the LAN device to the router after using the allocated unique IP address; and

the router adding the allocated unique IP address returned from the LAN device to the dynamic unique IP address pool.

10 5. A system for using an IP address on a LAN, which comprises:
a LAN device, connected to a router, for sending a request for an unique IP address to the router, receiving an allocated unique IP address from the router, and returning the allocated unique IP address to the router after using the allocated unique IP address; and

15 the router, connected to the LAN device, for receiving the request for the unique IP address from the LAN device, allocating the unique IP address to the LAN device, and receiving the allocated unique IP address from the LAN device after the LAN device has used the allocated unique IP address.

20 6. A system for using an IP address on a LAN, which comprises:
a LAN device, connected to router, for sending a request for an unique IP address to the router, receiving an allocated unique IP address from the router, and returning the allocated unique IP address to the router after using the allocated unique IP address; and

25 the router, connected to the LAN device, containing a dynamic unique IP address pool having the unique IP addresses which are not statically allocated to a specific LAN device, for receiving the request for the unique IP address from the LAN device, allocating the unique IP address of the dynamic unique IP address pool to the LAN device, receiving the allocated unique IP address from
30 the LAN device after the LAN device has used the allocated unique IP address.

7. The system of Claim 6, wherein the router adds the allocated unique IP address returned from the LAN device to the dynamic unique IP address pool.